

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

The top of page two of the Official Action comments that the listing of references in the specification is not a proper Information Disclosure Statement. It is noted in this regard that the document discussed on page one of the application was submitted in the Information Disclosure Statement filed on July 30, 2003. Such document has been considered and made of record by the Examiner as indicated by the initialed copy of Form PTO-1449 returned with the recent Official Action. The only other document mentioned in the application is U.S. Patent No. 4,235,312 mentioned on page 29 of the application. This document is cited simply for purposes of disclosing an air motor that could be used as an actuator to generate a linear brake-actuating input acting on the wedge member as a pulling force.

The subject matter of this application pertains to a wedge-operated disc brake apparatus. As recited in independent Claim 1, the wedge-operated disc brake apparatus comprises a piston accommodated within a cylinder portion to be rotatable about and slidable along an axial direction of the piston to push a brake pad toward a brake rotor, an actuator that generates a linear brake-actuating input, a wedge transmission mechanism connected to and driven by the actuator to convert the linear brake-actuating input into a brake-actuating output in the axial direction of the piston, with the brake-actuating output being transmitted to the piston to cause the piston to push the brake pad toward the brake rotor, and an automatic gap adjusting mechanism for automatically adjusting the gap between the brake pad and the brake rotor during the non-braking state. Claim 1 goes on to define that the automatic gap

adjusting mechanism comprises an adjusting wheel provided on the outer circumference of the piston end portion, an adjusting nut provided on the inner circumference of the piston, an adjusting lever adapted to rotate the adjusting wheel, and an adjusting bolt threadly engaged with the adjusting nut and engaged with the brake pad.

One of the differences between the wedge-operated disc brake apparatus at issue here and the disclosure in U.S. Patent No. 4,553,646 to *Carré et al.* is that the wedge transmission mechanism and the actuator which generates the linear brake-actuating input are configured so that the linear brake-actuating input acts on a wedge member of the wedge transmission mechanism as a pulling force. Thus, as now set forth in amended independent Claim 1, the wedge transmission mechanism comprises a wedge member and is connected to the actuator to be driven by the linear brake-actuating input which acts on the wedge member as a pulling force.

In *Carré et al.*, the automatic adjustment brake force is provided with a wedge 26, but this wedge 26 is pushed in the direction indicated by the arrow G illustrated in Fig. 1 by the brake-actuating input generated upon operation of the brake motor. Thus, in *Carré et al.*, the brake-actuating input acts on the wedge 26 as a pushing force. The claimed wedge-operated disc brake apparatus defined in independent Claim 1 is thus patentably distinguishable over the disclosure contained in *Carré et al.*

The Official Action also sets forth a provisional obviousness-type double patenting rejection of independent Claim 1 based on Claim 1 of copending application No. 10/629,862. That rejection is respectfully traversed for at least the following reasons.

The claimed wedge-operated disc brake apparatus recited in Claim 1 of this application comprises, together with the other claimed features, an automatic cap adjusting mechanism for adjusting the gap between the brake pad and the brake rotor during the non-braking state. Independent Claim 1 of the copending application is devoid of any recitation of an automatic cap adjusting mechanism, let alone various features associated with such an automatic cap adjusting mechanism such as set forth in Claim 1 of this application. Thus, no basis exists for observing that the claimed invention recited in this application would have been obvious in light of the invention defined in independent Claim 1 of the copending application. Also, that Claim 1 of the copending application may be broader in scope than Claim 1 of this application is not a basis for concluding that the claimed invention recited in claim 1 of the present application would have been obvious in light of Claim 1 of the copending application.

For at least the foregoing reasons, the Examiner is respectfully requested to withdraw the obviousness-type double patent rejection.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful

in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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